

Megalithic Pochampad: The Skeletal Biology and Archaeological Context of an Iron Age Site in Andhra Pradesh, India



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IRON TECHNOLOGY EMERGED IN SOUTH ASIA from regional Copper Age (Chalcolithic) and Bronze Age (Harappan) traditions by 1000 B.C., replacing the dominance of these earlier metallurgical industries at different times prior to the dawn of the Early Historic period (Nagaraja Rao 1971, 1981). Marking the final “Age” of Indian prehistory, iron is uncovered in the archaeological assemblages of the Gandharan Grave Culture of northern Pakistan (1000–300 B.C.), at Pirak and other sites on the Kachi Plain of Pakistan’s Indus Valley (by 900 B.C.), with the Painted Grey Ware cultural tradition extending from Baluchistan in western Pakistan to Uttar Pradesh in northern India (900–300 B.C.), and with the “megalithic complex” that spread from the Himalaya foothills southward to peninsular India and Sri Lanka from the early second millennium B.C. in Kashmir to c. A.D. 50 in south India (Agrawal 2000; Chakrabarti 1992; Deo 1985; Kennedy 2000a:326–357, 2000c; Leshnik 1974; Possehl and Rissman 1992; Possehl and Gullapalli 1999) (Fig. 1).

Megaliths are stone monuments visible on the landscape as alignments of standing stones, single stone slabs supported by several boulders to form an enclosed space (dolmens, dolmenoid cists), single or grouped upright standing stones (menhirs), arrangements of large boulders in a circle, and cairns of heaped rubble (Fig. 2). Some above-ground or shallowly buried dolmenoid cists had “port holes” or passages allowing for access of grave goods, food, or additional skeletal remains into the burial chamber. These hallmarks of the megalithic complex of the Indian Iron Age are frequently associated with burials in subterranean stone cists within which human skeletal remains are recovered with iron implements and horse trappings, distinctive red and black wheel-turned and fired ceramic wares, and faunal and floral remains indicative of village farming and pastoral socioeconomic traditions, preserving in certain cultural aspects the lifeways of pre-Iron Age food-producing populations. These megalith builders later became culturally amalgamated with urban-based populations of the Early Historic

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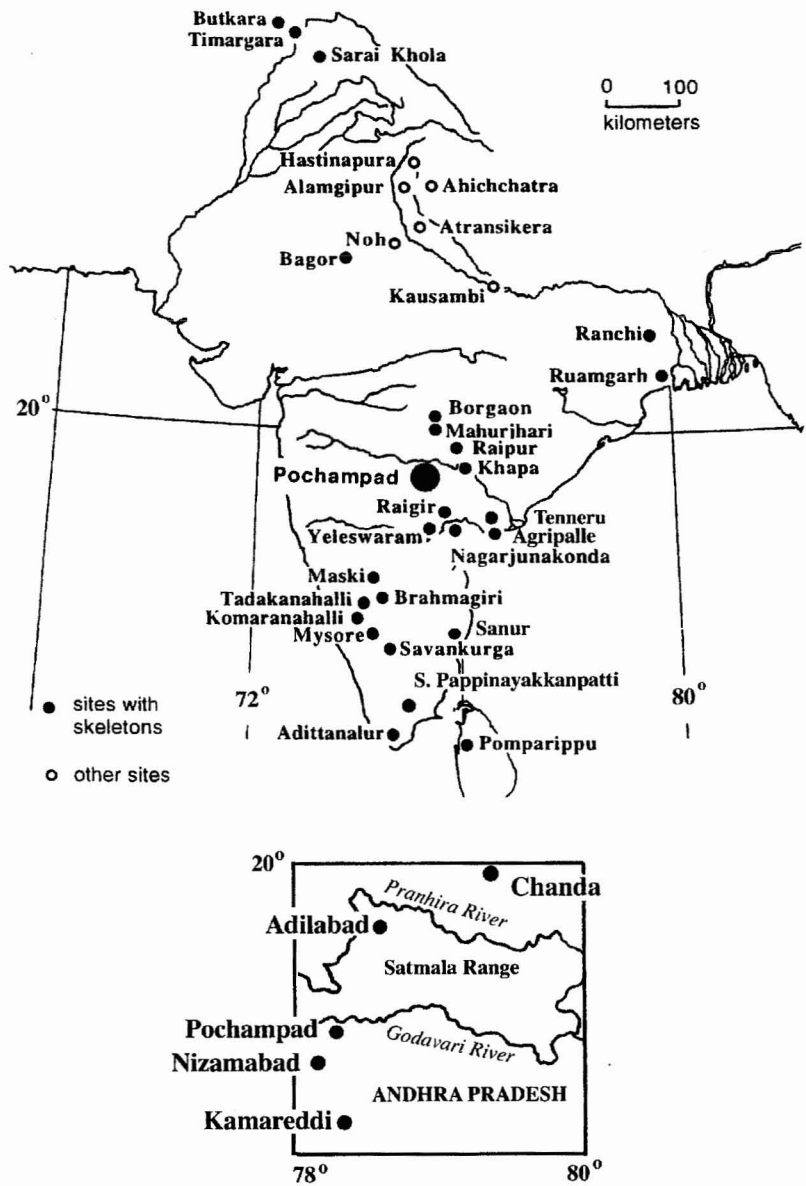


Fig. 1. South Asian Iron Age sites with inset of the location of the Pochampad site.

period who introduced the classical elements of Hindu and Buddhist civilization, although some geographically marginal tribal peoples have continued erecting megalithic structures in association with their funerary rites to the present day.

Of the over 1400 megalithic sites recorded from the subcontinent in 1985, 1116 are from peninsular India (Deo 1985). Since 1820, when their archaeological value was first recognized (Babington 1823), over 239 had been excavated, often by treasure hunters rather than by trained archaeologists. Many of these sites contained preserved human skeletons, but the number of published scientific



Fig. 2. Iron Age “domenoid cists” at Stayun Kaloor near Nagpur, India, painted by J. H. Rivett-Carnac (1872, pl. 2). Called “cromlechs” by the artist, this term has become obsolete in archaeology. Depicted here are stone slabs supported on upright stone walls that served as burial chambers; the holes allowed survivors of the deceased to insert grave goods and possibly food.

studies of these remains is less than 30 (Kennedy 2000a:343; Kennedy and Caldwell 1984; Rao 1988) (Table 1). Anatomical data obtained from laboratory analyses by trained biological anthropologists of human skeletal remains from archaeological localities provide information about earlier lifeways and palaeodemographic aspects of extinct populations unobtainable from the records of artifacts, stratigraphy, and texts. Not only is the biological anthropologist able to discern evolutionary trends and movements of populations, but laboratory analysis of osseous and dental structures shed light on the profiles of earlier peoples with respect to their rates of mortality, morbidity, fertility and fecundity, patterns of ontogenetic growth and development, nutritional status, health, and disease. Evidence of accidental or inflicted trauma, population density, and habitat preference also emerge from rigorous scientific analysis. And determination of degrees of genetic affinities of one ancient population with another and geographically and temporally more distant enclaves remains a critical feature of modern scientific approaches to the study of the ancient dead. Laboratory procedures involving comparative analyses of measurements and observations of skeletal specimens provide at present more reliable results than biomolecular data from DNA methods, especially in cases of ancient bone from tropical regions (Kumar et al. 2000).

The present study describes the biological anthropology of Indian Iron Age human skeletal remains recovered in the 1960s from the megalithic burial site of Pochampad in southern India. Challenges for the present author included the examination of poorly preserved bones and teeth that had been carelessly stored and commingled with other prehistoric skeletal series in their repository in India.

TABLE 1. SOUTH INDIAN AND SRI LANKAN MEGALITHIC IRON AGE SKELETAL SERIES WITH PUBLISHED DESCRIPTIONS

SITE	LOCATION	NUMBER OF SPECIMENS	CITATIONS
Adittanalur	Tamil Nadu	16	Chatterjee and Gupta 1963
Agripalle	Andhra Pradesh	4	Rao et al. 1996
Brahmagiri	Karnataka	5	Sarkar 1960, 1972
Komaranahalli	Karnataka	6	Caldwell and Kennedy 1995
Mysore	Karnataka	1	Bain 1980
Nagarjunakonda	Andhra Pradesh	1	Gupta et al. 1970
Pomparippu	Sri Lanka	14	Lukacs 1976
Raigir	Andhra Pradesh	11	Kennedy 1965, 1990
Sanur	Tamil Nadu	2	Bose 1959
Savankurga	Karnataka	1	Branfill 1881
S. Pappinayakanpatti	Tamil Nadu	1	Walimbe and Selvakumar 1998
Tadakanahalli	Karnataka	3	Caldwell and Kennedy 1995
Yeleswaram	Andhra Pradesh	17	Gupta and Dutta 1962; Kennedy 2000b; Sarkar 1972

Note: This list does not include South Asian Iron Age sites from the Gandharan Grave Culture, from Pirak and vicinities on the Kachi plain, from sites associated with the Painted Grey Ware cultural tradition or megalithic Iron Age sites in parts of India outside of the peninsular region in which Pochampad is located. For details of other Indian Iron Age sites, see Kennedy 2000a: 12–13, 326–357.

There was also the frustration of interpreting three sets of excavation records containing inconsistent notations, as well as the creation of a catalog that correctly included the actual skeletal specimens from Pochampad. However, this effort seemed necessary given the relative paucity of human skeletal series from Indian Iron Age sites and the need for clearer insights into the lifeways of those South Asian populations, which survived prior to their acculturation into the traditions of the Early Historic period, in peninsular South Asia.

ARCHAEOLOGICAL CONTEXT AT POCHAMPAD

Pochampad (or Pochampadu) is an Iron Age burial site with megalithic stone circles situated on the right bank of the Godavari River in Andhra Pradesh, southern India (78° 20' East, 18° 50' North). Some archaeologists place the site in Adilabad district (*Indian Archaeology—A Review (IAR)* 1963–1964, 1964–1965, 1966–1967; Leshnik 1974; Rao 1988) while others locate it in adjacent Nizamabad district (Alur 1979; Krishna Sastry 1983). An Iron Age habitation area 1.6 km upstream on the opposite bank is associated with the Pochampad burial site on the basis of shared ceramic styles, iron implements, and faunal remains, however this connection cannot be established with certainty. During the final centuries of the Iron Age in this part of India, it was customary for burial and habitation localities to be geographically separated by short distances. There are no radiometric or thermoluminescent dates available for Pochampad, but Roman coins found at other southern Indian megalithic burial sites in direct association with archaeological artifacts of similar ceramic pattern and iron implements suggest that Pochampad was used as a burial site between c. 300 B.C. and A.D. 50 (Wheeler 1947–1948).

Reconstructing the history of excavations at Pochampad in the 1960s relies upon two sets of published sources: (1) the reports of the Anthropological Survey of India, New Delhi, *IAR* for 1963–1964, 1964–1965, and 1966–1967; (2) an account in Krishna Sastry's (1983:82–83) book, *The Proto and Early Historical Cultures of A. P.*, written nearly 20 years after the Pochampad excavations prior to his appointment as director of the Department of Archaeology and Museums, Government of Andhra Pradesh, Hyderabad. A third source of information is an unpublished report by a Mr. P. R. Murty of Hyderabad written between 1963 and 1965. The present author is familiar with these sources as well as with the human skeletal remains housed at the Department of Archaeology and Museums. Most, but not all of these bones, bear on their surfaces catalog numbers inscribed in black India ink. But what might appear to be adequate documentation of the individual skeletal specimens and their burial contexts is flawed by numerous inconsistencies between the published and unpublished accounts as well as by those human remains that have been salvaged and identified according to their archaeological contexts. This was a problem that this investigator and his associates could only partially resolve given the absence of additional field and museum data and conflicting recollections about the Pochampad excavations offered by those senior Indian archaeologists who had been involved in work at the site. A brief description of Pochampad by B. R. Subrahmanyam (1987:15) further obscures the actual ruins and burial discoveries at Pochampad when he writes in an article published some twenty years after the excavations that "At Pochampad a total of 8 excavated graves (of which) 6 are pits with or without cairns and 3 are cists with or without port-holes. Some of the pits contained extended inhumations: particularly interesting is Megalith 7 (Megalith I?) which contained two skeletons of adults and also one of a horse" (words in parentheses are inserted by the present writer). Unfortunately the problem of maintenance of accurate records and low standards of curation of human burials persists in some South Asian research facilities, in part a reflection of a lack of interest in these remains given the greater importance ascribed to the recovery and curation of cultural objects.

Because of the threat of submergence of Pochampad and neighboring Iron Age megalithic sites in this locality by construction of a dam across the Godavari River, salvage efforts were carried out during field seasons between 1963 and 1967 under the supervision of M.A.W. Khan, then director of the Department of Archaeology and Museums, Hyderabad (*IAR* 1963–1964:1, 1964–1965:1, 1966–1967:1). Faunal remains recovered from the burial site during the 1971 and 1972 field seasons were identified as domesticated species of sheep and goats (*Capridae*, *Ovis vignei*), cattle (*Bos indicus*), and horse (*Equus caballus*) (Alur 1979).

The first excavation in 1963 was within a double circle of 14 untrimmed granite boulders, some 3.6 m in diameter, surrounding a rectangular pit 1.8 m in depth and oriented in a north-south direction. Potteries of classical megalithic Iron Age Black-and-Red ware as well as all-black and all-red wares were found in the pit and vicinity along with iron javelins, daggers, and hatchets. Parallel-sided stone blades, points, and lunate-shaped microlithic tools were scattered over the surface of the excavation area that was labeled Megalith I. Additional finds of iron daggers, copper hilts, and small terracotta figurines were recovered at this same locality during the 1964–1965 field season. Human skeletal remains were recovered during these two periods of excavation.

Megalith II at Pochampad was excavated during the 1966–1967 field season. This was a single circle of 19 closely arranged granite boulders, some 10.6 m in diameter. They surrounded a central pit with dimensions of 2.16-by-1.68 m cut along a north-south direction. Accompanying human skeletons and bones of a horse were an iron chisel and sickle, pottery dishes, pots and bowls, and rubble scattered between the boulders and into the center of the burial pit.

Megalith III, a single circle of 14 boulders, appears to have been opened during the same field season of 1966–1967. Its subterranean chamber measured 2.85-by-2.09 m. Within this was discovered a heap of human and faunal skeletal remains and all-red painted pots. This would seem to be the last megalithic structure excavated at Pochampad, but there are labels attached to some of the human skeletal remains deposited at the facility of the Department of Archaeology and Museums in Hyderabad upon which is written in black ink “Megalith IV,” a circumstance that remains unclear given the absence of any written account of this deposit.

THE SKELETAL INVENTORY

Human skeletal and faunal remains from Pochampad were examined in Hyderabad by the author in 1972 and 1988. Labels are marked on some bones with black ink while other specimens are tagged with paper labels, all bearing the full name of the site of their recovery or its abbreviation “P.P.D.” The author was able to compile an inventory of human skeletal remains based upon what has been preserved (Table 2). When a comparison of this inventory is made with the notes about the human skeletal remains reported for the site in *IAR*, in Krishna Sastry’s

TABLE 2. POCHAMPAD SKELETAL INVENTORY

SPECIMEN NO.	MEGALITH NO.	DESCRIPTION OF SKELETAL REMAINS
1966, 2/66	I	Portions of a cranial vault.
1966, 3/66–4/66	II	Left portion of frontal bone and calvaria.
1966, 5/66	III	Fragments of cranial bones and loose teeth of the permanent dentition; two individuals.
1964, 1/4 (Kennedy C)	I	Left half of a maxilla with partially complete permanent dentition.
Unlabeled (Kennedy A)	I	Mandible missing its rami but with partially complete permanent dentition.
1966, 5/6 (Kennedy B1 and B2)	I	Mandibular and maxillary fragments with dentition of two individuals; one occipital bone.
1963–64 (no other numbers)	II	Fragments of maxilla and mandible with permanent loose teeth and postcranial bones of several individuals.
1966, 1/4	IV	Skull, separate left mastoid process, two occipital bones.
1966 (no other number)	III	One occipital bone.
1964, 3/64	I or II?	Fragments of cranial and mandibular bones and loose permanent teeth.

Note: Skeletal remains recovered from Megalith IV were not available to the author for examination.

book published in 1983, and in the unpublished manuscript by Murty, it becomes immediately obvious that some skeletons encountered at the time of excavation are no longer in the series curated in Hyderabad. Furthermore, there are inconsistencies in the published and unpublished accounts.

For Megalith I three burials are reported in *IAR 1963–1964* for the first field season at Pochampad in 1963. Based upon Murty's unpublished manuscript, Krishna Sastry (1983:83) notes that, "It appears that the burials were partly disturbed by treasure-hunters. However, the funerary assemblages remained undisturbed." It is impossible to interpret this contradiction of what the archaeologists encountered, but the same author goes on to write, "In the middle of the pit were seen two crushed skulls beside a few bones deposited over the red-ware pots. The skulls were completely crushed, leaving no traces for identification. The mandibles were seen dislodged from their sockets." These specimens bear the catalog entry P.P.D. No. 1964, 1/64. However, the preserved skeletal remains bearing this number include the left half of a maxilla but retain a partially complete permanent dentition (now designated for clarification as "Kennedy C"). Also present is an unlabeled mandible missing its rami but with a nearly complete permanent dentition (now designated for clarification as "Kennedy A"). Megalith II was opened during this initial field season at Pochampad, and teeth and post-cranial bones of several individuals labeled P.P.D. 1963–1964, Megalith II, are present in the collection in Hyderabad.

There is no mention of recovery of skeletal remains in the notice of continuing excavations at Pochampad in *IAR* for 1964–1965, but during this second season Megalith II was reopened and, according to Krishna Sastry (1983:83), "To the extreme left of the pottery were seen 4 skulls in a crushed state. One of the skulls faced upwards, with the frontal region and mandible intact, and the bones lain [sic] in an extended position." These remains include the calvaria and dentition labeled P.P.D. No. 1966, 3/66–4/66 and the left fragment of a frontal bone labeled P.P.D. No. 1966, 3/66, Megalith II.

Five megalithic burials are reported in *IAR* for 1966–1967, within which two human skeletons, deemed to be an adult male and adult female, were found oriented in an east-west position. This source goes on to report that, "Most of the bones were found in disarticulated positions. The maxilla and mandible with their teeth intact were turned partly to the right. An ivory comb was seen beneath the skull. The ribs and vertbrae, the pelvic girdle, right tibia and fibula, and metacarpals were found mixed up. The burials seem to be secondary. Iron implements, such as a sickle, a chisel and a triangular object of indeterminate use were found between the tibiae." The remains thus described appear to have come from Megalith III, although Krishna Sastry's (1983:83) description of these is much less detailed: "Along the western edge of the pit [in Megalith III] and over the red-ware pots was placed a heap of skeletal remains in a disarticulated state. The crushed skull, separated from the mandible, is placed towards the north and turned to [the] west. On the right side of the skull a heap of animal bones was noticed at a fairly higher level."

Preserved skeletal remains from Megalith III are labeled P.P.D. No. 1966, 5/66, which is represented by a number of cranial fragments and permanent loose teeth of perhaps two individuals. P.P.D. No. 1966, 5/6 consists of maxillary fragments with some permanent teeth in their alveoli plus unlabeled fragments of

mandibular right and left corpora of two individuals, one with its right molar permanent teeth and the other with its left molar permanent teeth, all in their alveoli. These mandibular fragments are now distinguished for clarification as "Kennedy B1 and B2," respectively. A single occipital bone has an incomplete label marking of P.P.D. No. 1966, Megalith III.

Coming either from Megalith I or Megalith II are pieces of cranial bones and teeth bearing the labels P.P.D. No. 1964, 3/64. There is a mandible in two pieces without teeth in this assortment. Their provenience in the Pochampad burial localities is not recorded in any of the three written sources. Remaining skeletal specimens in the preserved Pochampad series in Hyderabad are from Megalith IV about which no recorded data are available. They are identified as coming from Pochampad only by their markings in ink on the bones. All are cranial fragments, as listed in Table 2.

The number of individuals represented in this skeletal series is estimated to be over ten. The presence of loose teeth and bone fragments suggest that secondary burial customs were practiced, i.e., the deposition of parts of a skeleton into the megalithic burial chamber by survivors of the deceased individual after the body had undergone considerable disintegration from erosional forces and scavenger activity following death. The length of time that Pochampad served as a burial site is unknown beyond what is estimated for the duration of the Iron Age in this part of India. The problem of commingling has been compounded by not maintaining together the bones of individuals before and after their transport from the site to the holding area in Hyderabad and subsequent mishandling by curators. Indeed, in one wooden crate there was included with the Pochampad specimens facial bones of a juvenile individual, and accompanying these were fragments of sphenoid and maxillary bones. A handwritten note read: "Tenner Exc. 1970. Two fragments of Skull No. 3/70 (undecipherable signature) 20-9-72." A second assemblage of bone fragments from Tenner (or Tenneru), a megalithic burial site 95 km southeast of Pochampad in Krishna district, Andhra Pradesh, was found mixed into the Pochampad series. In most cases the correct provenience of the skeletal series could be established by the inked markings on the bones themselves, but this exemplifies one of the problems faced by many investigators in South Asia. The skeletons from Tenner have not as yet been described in any published source, but the researcher who initiates this project will now be in a better position to distinguish Tenner skeletons from those of Pochampad!

MORPHOMETRIC ANALYSIS (TABLES 3, 4, AND 5)

Specimen No. 1966, 2/66, Megalith I

This young adult female individual is represented by portions of a cranial vault of which major parts of the frontal and parietal bones are preserved (see Tables 4 and 5). The occipital bone and cranial base are missing (Figs. 3 and 4). The proportions of the vault are short and broad and parietal eminences are pronounced. There is a moderately developed median frontal eminence. Parts of the frontal sinus are observable through the broken glabellar area. The forehead is low and bulbous in lateral profile, a feature characteristic of female cranial architecture. Postmortem fractures have occurred along sutural lines so that estimations of

TABLE 3. ESTIMATED MEANS OF LIVING STATURES FOR SOUTH INDIAN IRON AGE SKELETONS

SITE	STATURE ESTIMATES (mm)		CITATIONS
	MALES	FEMALES	
Brahmagiri (Karnataka)	1689 (2)	—	Sarkar 1972
Nagarjunakonda (Andhra Pradesh)	1743 (1)	1621 (2)	Gupta et al. 1970
Yeleswaram (Andhra Pradesh)	1754 (1) 1763 (2)	1673 (1) 1674 (1)	Sarkar 1972; Kennedy 2000b
Pochampad (Andhra Pradesh)	1799 (1) Sex uncertain		Present study

Note: Estimates of living stature are based upon measurements of long bones of the upper and lower extremities and using the regression formulae for adult males and females of European ancestry, according to Trotter's (1970) methods. For a discussion of these and other Iron Age estimations of living stature from skeletal and modern subjects of the Indian subcontinent, see Baernstein and Kennedy (1990).

degrees of synostoses are difficult. Age of this individual is established by the thickness of the bones of the cranial vault and apparent closure of the sagittal suture at pars verticis. Closure at pars pterica suggests an age of 25 to 30 years at time of death.

Specimen 1966, 3/66, Megalith II

Portions of the left side of the frontal bone, right and left parietal bones, and the occipital bone are preserved along with the left superior orbital margin (Figs. 3 and 4). The sex of this individual is uncertain, but the gracility of the vault suggests it is female. This estimation is supported by observation of the low to moderate size of the glabellar region and bilateral brow ridges. The forehead is moderately elevated with a vertical profile. The frontal bone supports a prominent median eminence. Temporal lines are clearly marked and do not extend posteriorly to the parietal bones. The vault is short and broad with pronounced parietal eminences of which the right eminence is larger than its left counterpart. Occipital curvature is even, but the occipital bone is broken just superior to the nuchal crests. Postmortem damage has resulted in loss of details of the cranial sutures, but at the bregma synostosis is advanced and suggests that this individual died after 30 years (see Tables 3 and 4).

Distortion of the right side of the vault, due to an earlier faulty attempt at anatomical reconstruction, exaggerates the bieryonic breadth, but it is probable that brachycrany is a feature of this individual. The nasal root is high and a small preserved segment of the nasal bones indicates that the nasal profile was straight. No pathological features were observable on this specimen.

Unlabeled Specimen (Kennedy A), Megalith I

This is a mandibular corpus with the permanent teeth in their alveoli but rami are missing (Fig. 5). The median form of the mental eminence is prominent.

TABLE 4. ANTHROPOMETRIC MEASUREMENTS AND INDICES OF THE SKELETON

CRANIUM	SPECIMEN NUMBERS AND SEX	
	1966, 2/6, FEMALE	1966, 3/66, FEMALE
Glabella-Opisthocranian length (1)		170
Biuronic breadth (2)	142	
Parietal chord (30)	125	100
Occipital chord (31)		113
Frontal arc (26)		114
Parietal arc (27)	144	129
Thickness of parietal eminence	6	6
Thickness of frontal eminence	4.5	4.5
MANDIBLE	KENNEDY A, FEMALE	KENNEDY B1, MALE
Symphysis height (69)	34	
Corpus length (68)	47	
Height of corpus at right M1 (69-1)	30	
Height of corpus at left M1	30	31.5
Thickness of corpus at right M1 (69b)	10	14
Thickness of corpus at left M1	10.5	13.5
Length of molar row, right (80-3)	32.5	33
Length of molar row, left	33	33
Length of molar-premolar row, left (80-2)	46	
	1963-1964, MEGALITH II,	
HUMERUS	FEMALE	
Minimum shaft diameter, AP, right (6)	16	
Minimum shaft circumference, right	61	
Mid-shaft diameter, AP, right (6c)	20	
Mid-shaft diameter, lateral, right (6b)	19	
Diaphyseal index, right	80.0	
Middle index, right	95.0	
	1963-1964, MEGALITH II,	
RADIUS	SEX UNCERTAIN	
Minimum shaft diameter, AP, right	13	
Minimum shaft diameter, AP, left	13	
Mid-shaft diameter, lateral, right	11	
Mid-shaft diameter, lateral, left	11.5	
Mid-shaft circumference, right (5-5)	44	
Mid-shaft circumference, left	45	
Middle index, right	84.9	
Middle index, left	88.5	
	1964-1964, MEGALITH II,	
ULNA	FEMALE?	
Minimum shaft diameter, AP, left	12	
Minimum shaft diameter, lateral, left	10	
Mid-shaft diameter, AP, left (11)	17	
Mid-shaft diameter, lateral, left (23)	12	
Minimum shaft circumference left (3)	37	
Diaphyseal index, left	58.5	
Platolineal index, left	70.6	

(Continues)

TABLE 4. (continued)

FEMUR	1963-1964, MEGALITH II,	
	FEMALE?	
Maximum length, left (1)	492	
Minimum shaft diameter, AP, right	27	
Minimum shaft diameter, AP, left	27	
Minimum shaft diameter, lateral, right	24	
Minimum shaft diameter, lateral, left	24	
Subtrochanteric diameter, AP, right (10)	32	
Subtrochanteric diameter, AP, left	25	
Subtrochanteric diameter, lateral, right (9)	29.5	
Subtrochanteric diameter, lateral, left	32	
Mid-shaft diameter, AP, right (8)	29	
Mid-shaft diameter, AP, left	30	
Mid-shaft diameter, lateral, right (7)	25	
Mid-shaft diameter, lateral, left	25	
Head diameter, AP, left (18)	44	
Head diameter, lateral, left (19)	43.5	
Minimum shaft circumference, right	85	
Minimum shaft circumference, left	85.5	
Mid-shaft circumference, right (8)	67	
Collo-diaphyseal angle, left	114 degrees	
Platymetric index, left	78.1	
Middle index, right	86.2	
Middle index, left	83.3	
Pilastric index, right	116.0	
Pilastric index, left	120.0	
Popliteal index, right	112.5	
Popliteal index, left	112.5	
Head index, left	202.1	
1963-1964, MEGALITH II,		
TIBIA	FEMALE?	
Maximum length, left (1)	422	
Nutrient foramen diameter, AP, right (8a)	32	
Nutrient foramen diameter, AP, left (8a)	34	
Nutrient foramen diameter, lateral, right	22—	
Nutrient foramen diameter, lateral, left	212.5	
Minimum shaft diameter, AP, right	25	
Minimum shaft diameter, AP, left	25	
Minimum shaft diameter, lateral, right	19	
Minimum shaft diameter, lateral, left	18.5	
Mid-shaft diameter, AP, right (8)	28	
Mid-shaft diameter, AP, left	29	
Mid-shaft diameter, lateral, right (9)	19	
Mid-shaft diameter, lateral, right (9)	19	
Mid-shaft diameter, lateral, left	19	
Minimum shaft circumference, right (10b)	72.5	
Minimum shaft circumference, left	73	
Mid-shaft circumference, right	77	
Mid-shaft circumference, left	79	
Cnemic index, right	68.7	
Cnemic index, left	63.2	
Middle index, right	67.8	

(Continues)

TABLE 4. (continued)

1963-1964, MEGALITH II, FEMALE?	
TIBIA	
Middle index, left	65.5
Length-thickness index, left	17.3
Crural index, left	86.8
1963-1964, MEGALITH II, SEX UNCERTAIN	
FIBULA	
Mid-shaft diameter, AP, right (3-2)	15.5
Mid-shaft diameter, AP, left	16
Mid-shaft diameter, lateral, right (3-1)	9
Mid-shaft diameter, lateral, left	10
Mid-shaft circumference, right (4)	42
Mid-shaft circumference, left	43
Minimum shaft circumference, right (4a)	37.5
Maximum shaft circumference, right	54
Mid-shaft index, right	58.1
Mid-shaft index, left	62.5
1963-1964, MEGALITH II, SEX UNCERTAIN	
PATELLA	
Maximum breadth, right (2)	38
Maximum breadth, left	38.5
1963-1964, MEGALITH II, SEX UNCERTAIN	
TALUS	
Maximum length, right (1)	54
Maximum length, left	52
Maximum breadth, right (2)	41
Maximum breadth, left	40
Maximum height, right (3)	29
Maximum height, left	30
Trochlea tali length, right (4)	33
Trochlea tali length, left	33
Trochlea tali breadth, right (5)	31
Trochlea tali breadth, left	30
1963-1964, MEGALITH II, SEX UNCERTAIN	
CALCANEUS	
Maximum length, left (1)	83
Maximum height, left (4)	49
Sustentaculum tali, length, right (5)	41
Sustentaculum tali, breadth, left (6)	45

Note: Measurements are millimeter (mm) units unless indicated otherwise. Numbers in parentheses following the name of the measurement refer to anthropometric codes for standards given in Knussmann (1988). Definitions of measurements not included in this source are in Kennedy et al. 1986.

TABLE 5. ODONTOMETRIC MEASUREMENTS OF THE DENTITIONS*

MEASUREMENTS (mm) AND INDICES	SPECIMEN NOS. AND SEX					
	1966, 5/66				1963-64, <i>MEGALITH II</i>	
	A FEMALE	FEMALE	B1 + B2 MALES	C ?	MALE	FEMALE
Maxillary Dentition						
R11 MD						8.5
L11 MD						8.1
R12 MD						6.8
L12 MD						6.9
RC MC		7.0				
LC MD		6.8				
RP3 MD		7.0				
BL		8.4				
RPM3 Index		83.33				
LP3 MD		7.0				9.7
LP3 BL		8.4				7.0
MPM3 Index		83.33				138.5
RPM4 MD		6.4				
RP4 BL		8.1				
PP4 Index		79.01				
LP4 MD		6.2				9.2
LP4 BL		8.5				7.4
LP4 Index		72.9				124.3
LM1 MD		8.6		9.4		11.0
LM1 BL		9.1		10.1		10.9
LM1 Index		94.50		93.0		100.9
RM2 MD		10.0		9.5		
RM1 BL		11.2		10.9		
LM2 MD						10.0
LM2 BL						10.5
LM2 Index						102.8
RM2 Index		89.28		87.15		
RM3 MD		8.5				
RM3 BL		9.5				
RM3 Index		89.47				
LM3 MD					10.9	
LM3 BL					9.6	
KM3 Index					113.50	
Mandibular Dentition						
R11 MD		6.0			4.7	
LM1 MD	4.3				4.9	
R12 MD					5.7	
L12 MD	3.9				6.0	
RC MD	5.4				7.2	
LC MD	6.0					
RP3 MD	6.1					
RP3 BL	7.2					
LP3 MD	6.2					
LP4 MD	5.6					
LP4 BL	7.6					
LP4 Index	73.6					

(Continues)

TABLE 5. (continued)

MEASUREMENTS (mm) AND INDICES	SPECIMEN NOS. AND SEX					
	1966, 5/66				1963-64, MEGALITH II	
	A	B1 + B2		C		
	FEMALE	FEMALE	MALES	?	MALE	FEMALE
RM1 MD	10.1		10.2			
RM1 BL	10.6		9.5			
RM1 Index	95.20					
LM1 MD	10.5		10.6			
LM1 BL	11.1		9.5			
LM1 Index	95.4					
RM2 MD	9.6		9.2			
RM2 BL	9.1		8.0			
RM2 Index	105.4					
LM2 MD	9.3		9.4			
LM2 BL	8.5		8.6			
LM2 Index	97.8					
RM3 MD	10.0		10.5			11.3
RM3 BL	9.7		9.5			10.4
RM3 Index	103.00					108.60
LM3 MD	10.5		10.9			
LM3 BL	9.9		10.5			
LM3 Index	106.00					

+ MD = Mesiodistal diameter; BL = Buccolingual diameter; R = Right; L = Left; I = Incisor; C = Canine; P = Premolar; M = Molar. P3 = First molar; P4 = Second molar; Index = MD/BL \times 100.

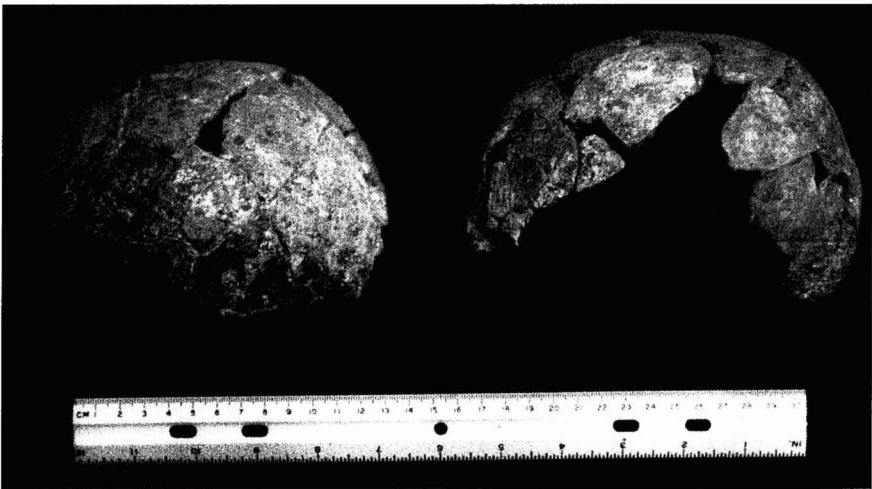


Fig. 3. Cranial vaults of Specimen Nos. 1966, 2/6, Megalith I (left) and 1966, 3/66, Megalith II (right) from Pochampad. Left lateral aspects.

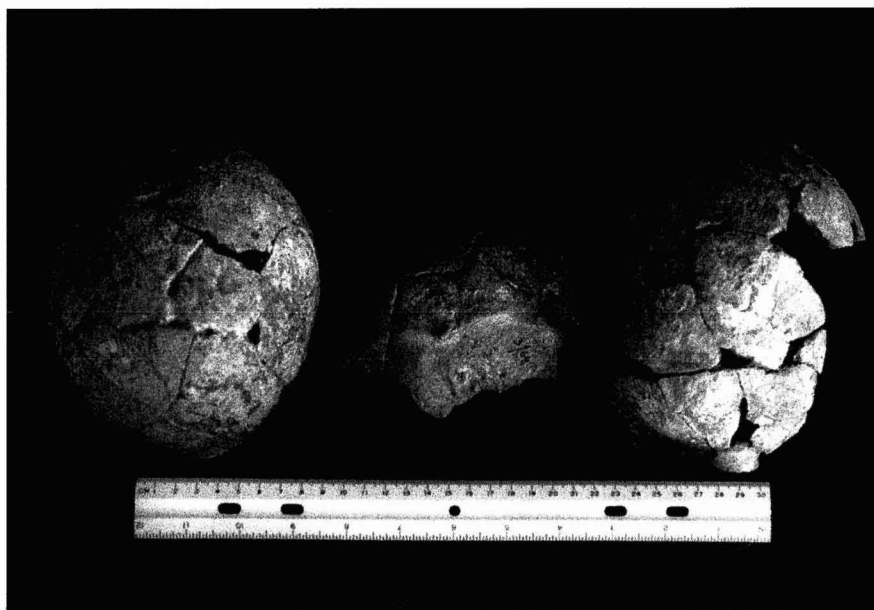


Fig. 4. Cranial vaults of Specimen Nos. 1966, 2/6, Megalith I (left) and 1966, 3/66, Megalith II (right) from Pochampad. Vertical aspects.

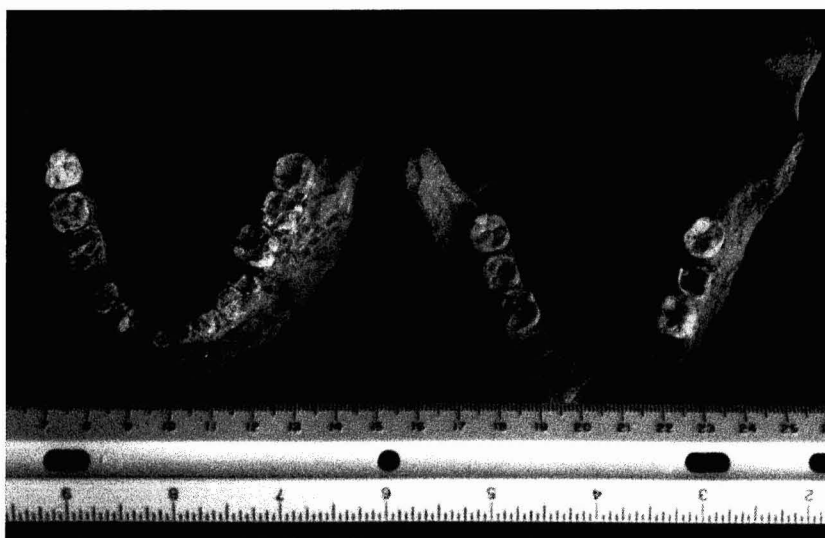


Fig. 5. Mandibles and dentition of Specimen Nos. 1966, Kennedy A (left) and 1996, Kennedy B1 (right) from Pochampad. Occlusal aspects.

Mylohyoid crests are low and genial tubercles are very reduced in size. The rocker jaw condition is present. This may be a female individual.

Enamel crowns are well preserved for all of the teeth with the exception of the left third molar and right lateral incisor. The occlusal surface of the left second

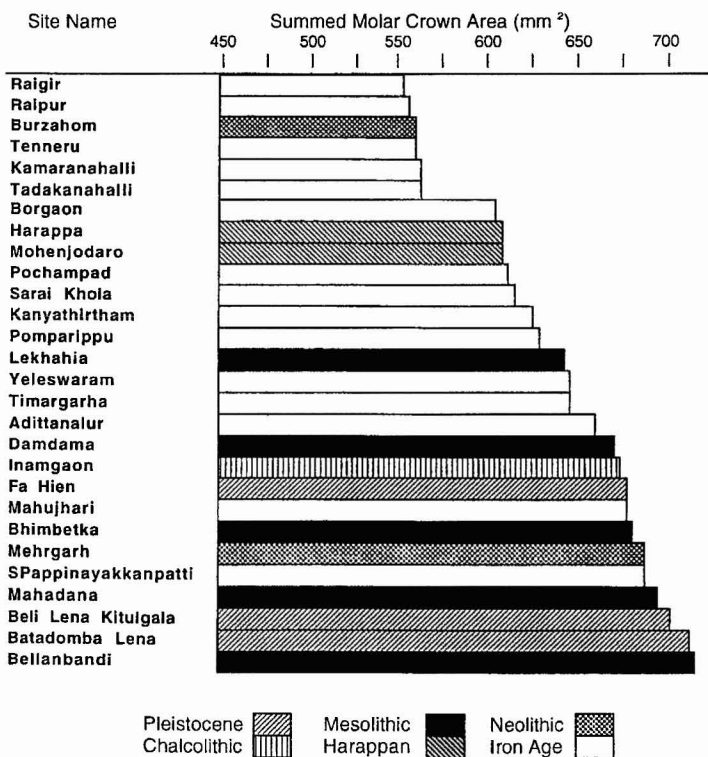


Fig. 6. Summed molar crown areas (mm²) of dental samples from 28 prehistoric sites in South Asia. Modified from Lukacs (1983) and Kennedy (1999).

molar was damaged postmortem. The right second premolar was lost postmortem. There is slight damage to the buccal surfaces of the left first and second premolars. Wear is most pronounced for the anterior dentition and to a lesser degree along the occlusal surfaces of the premolar-molar rows, degrees of attrition that suggest an age of 22 to 26 years for Indian Iron Age individuals. A striking feature is the roughness of the occlusal wear pattern, as few smooth enamel surfaces appear on the posterior dentition. These modifications are not indicative of postmortem erosional agencies; rather, they reflect severe tooth chipping before death. Caries, malocclusion, crowding, and calculus are not present. These are relatively small molar teeth as measured by summed molar crown area (594.43 mm²) (Fig. 6).

Specimen No. 1966, 5/66, Megalith III

Cranial bones are fragmentary and no effort was made at reconstruction, the largest piece being a right temporal bone without its mastoid process intact. Two individuals are represented in this deposit. Dental data indicate that one was a young adult since the upper right third molars and lower left third molars are fully erupted but exhibit minimal occlusal wear. With the exception of a right lower central incisor and left lower third molar, all remaining teeth are of the upper

dentition, some loose and others held in the alveoli of maxillary fragments. Moderate occlusal wear marks the lower left first molar, the adjacent premolars exhibit less wear. The anterior dentition shows greatest loss of occlusal enamel, particularly in the case of the right canine. This differential wear pattern is puzzling since no pathological conditions are observed which could suggest the favoring of one side of the mouth in mastication. Six enamel hypoplasial lines appear on the right canine. The loci of formation of this type of enamel defect observed on the surfaces of tooth crowns provide estimates of the age of the individual at the time of defect development. This condition can result from a temporary interruption of nutrient flow due to such stressors as short- or long-term disease conditions, famine, or metabolic disorders. With relief of such conditions in the immature individuals whose dental crowns and roots are in process of development prior to their eruption, enamel generation is restored. Thus crown development allows estimation of the time of appearance of the enamel hypoplasial lines or pits by measurements of the distances between the cemento-enamel junction to the mid-point of each hypoplasial line. The values for distance and corresponding age of the hypoplasial lines in the canine of this specimen are 8.0 mm/6 months, 7.2 mm/1 year and 6 months, 5.8 mm/3 years and 4 months, 3.2 mm/4 years, 2.1 mm/5 years and 2 months, 1.0 mm/6 years (Goodman and Rose 1991:288). The upper left first molar and right upper second molar have three cusps respectively, while the lower right third molar has four cusps and the occlusal surface is deeply crenulated.

Specimen No. 1966, 5/6 (Kennedy B1 and B2), Megalith III

These are unnumbered mandibular corpora with parts of permanent dentition which may belong to two individuals (Fig. 5). One corpus is associated with a left ramus, the other with a right gonial portion. Each corpus contains three molar teeth in their alveoli. Differences in wear patterns of the occlusal surfaces of the teeth, especially for the right and left third molars, suggest that two individuals are present, although size and morphological features are similar for the two corpora. The fragments are large and robust, the gonial portion exhibiting considerable eversion and marked pterygoid muscular attachments. Mylohyoid ridges are large. The corpus-ramus angle of one specimen suggests it belonged to a male individual. Eruption of the third molars in both fragments indicates an adult age, but differences in degree of attrition for these teeth, as well as for the right and left first molars, do not serve to resolve the question of commingling of remains of two persons in the same burial context. The right molar row shows moderate to pronounced occlusal wear for the first and second molars with the enamel preserved along the rims of the occlusal borders with flattened extensions of enamel radiating from the rims into the dentin covering the mass of the surfaces. However, the right third molar shows minimal wear, suggesting its recent eruption. The cusp-groove pattern is Y-5 for this tooth. There is no evidence of caries, malocclusion, or other dental pathological conditions. The left molar row shows low wear of the first molar which has a cusp-groove pattern of Y-5. This tooth has an occlusal pit on the mesio-buccal cusp which was in process of forming a carious lesion since the enamel had been penetrated. This condition does not appear to be a consequence of wear or postmortem damage. The left second molar

exhibits pronounced wear and some postmortem damage to the dental surface along the cemento–enamel junction where dentin is exposed. This tooth rests at a lower level than the adjacent teeth with elevated and sharp enamel rims. The left third molar shows wear but without exposure of dentin; rather, the occlusal surface is hollowed out to form a small basin with dentin exposed in three small pits, certainly foci for caries. The enamel rim of the left third molar is thick and smooth. The molar teeth have a summed molar crown area of 569.39 mm², a value indicative of a relatively small molar dentition. Maxillary fragments and six loose teeth were recovered from this burial pit.

Specimen No. 1966, 1/64 (Kennedy C), Megalith I

This is a left maxillary fragment with the dental row extending from the permanent left incisor distally to the second molar. These teeth are in their alveoli. Crowns were lost postmortem, save for the two molars. Wear is pronounced on the occlusal surface of the first molar, only a thin rim of enamel remaining. The second molar is slightly less worn, the enamel forming a dish-shaped hollow with exposure of dentin along the distal half of the occlusal surface. The maxillary bone fragment does not indicate presence of alveolar prognathism. The left nasal sill is oxycraspedotic. Symphyseal height is 21 mm. There is no evidence of dental or bone pathology in this specimen, an adult of undetermined age at time of death.

Specimen No. 1963–1964, Megalith I

Commingled with fragments of maxilla and the right half of a mandible are 13 permanent teeth. Occlusal wear is most pronounced on the first premolar and the first and second molars of the upper and lower dentition, but there is less wear on the premolars. However, minimal amounts of dentin are exposed on all of these teeth, a circumstance suggestive of a young adult age. There is the possibility that more than a single individual is represented in this dental series for the reason that some teeth are loose, and those in their maxillary and mandibular alveoli do not fit into an occlusal contact pattern that establishes their assignment to the dentition of one person. There is moderate wear of the anterior teeth of upper and lower dentitions, especially on the right upper canine. Lingual tubercles occur on the upper incisors, but there is no shoveling on the lingual surfaces. Enamel hypoplasial lines are absent in this dental sample.

Postcranial bones bearing this label assigned to them in the field at time of their recovery are commingled remains of several individuals, perhaps as many as three. Paired bones appear to belong to a single individual as indicated by mensural and morphological similarities. Indicators that these are bones of a female individual predominate, but some bones are of undetermined sex. All belong to adults. Of the upper extremities, the right humerus is represented by a complete diaphysis, a crushed right humeral head, and small fragments of the distal end of the shaft. The left humerus is less well preserved. The preserved diaphysis is straight and has an ovoid transverse pattern. Robusticity is low with respect to loci of muscular attachments, the bicipital groove forming a very shallow depression and a weakly elevated crest. The radii are preserved as portions of proximal diaphyses which are

straight. The radial tuberosities are low but extend 29.5 mm on both shafts. Interosseous lines are elevated and sharp, and the transverse sections at the mid-shaft are elliptical. The proximal and medial portions of a left ulna reveal a platolinal form and have pronounced anterior-posterior curvature at the proximal end. The supinator crest is low. Interosseous lines are sharply defined. There is a shallow attachment for the brachial ligaments just inferior to the semilunar notch. The other ulnar and radial fragments accompany these more complete bones, each exhibiting pronounced interosseous crests. Metacarpals are limited to the distal ends of bones 2, 3, 4, and 5 of the left hand. Another bone of the left hand is the distal second phalanx.

Bones of the lower extremity include complete right and left femoral diaphyses with portions of proximal and distal ends. The lesser trochanter and neck are present in each bone. The femora are platymeric and exhibit marked anterior-posterior curvature of the diaphyses. The pilastric development is medium to pronounced, the pilaster attaining its highest point at the mid-shaft region. The lesser trochanters are not large. The left femoral cervix is elongated with a colloidiaphyseal angle of 114 degrees. The left tibia is complete and the right tibia is represented only by the diaphysis. The tibial form is mesocnemic. There is pronounced anterior-posterior curvature of both shafts, especially of the left tibia. Head retroversion is slight, the vastus line is indistinct, and the tibial tuberosity is low. These features are found in highest frequencies in females. Right and left fibular diaphyses are preserved, the right fibula retaining its distal end. Slight bowing of the fibular diaphyses is present. The right lateral maleolus is robust and possesses a deep fossa for the talar ligament. Interosseous lines are low, and fluting of the shafts is absent. Right and left patellae are moderately robust and do not show osteoarthritic lipping. Right and left tali are well preserved. The os trigonum of the right talus is fused to the posterior aspect, and lateral talar extensions are prominent. But the left talus has an unfused os trigonum. Squatting facets do not appear on these tali. The medial portion of the left calcaneus can be identified amongst other fragments of the same bone and of a right calcaneus. There are portions of right and left ilia which define a wide sciatic notch as well as parts of the acetabulum.

If most of these postcranial bones belong to one individual, it is probable that this is a young adult female. Absence of osteoarthritic remodeling of postcranial bones and degrees of epiphyseal union of long bones support the estimate of an age of under 30 years. However, pronounced bowing of the long bones of the lower extremities are indicative of a pathological condition, as noted above. It is unlikely that this abnormality could be due to vitamin D deficiency or nutritional stress related to rickets in childhood. Presence of a treponemal disease, such as yaws, is a possible pathological factor, but a suggestion that these pathological markers are diagnostic of syphilis at Pochampad, or at any prehistoric South Asian site, would be unfounded (Rao et al. 1995).

DISCUSSION AND CONCLUSIONS

Palaeodemographers with access to skeletal samples of relatively large numbers of individuals from a specific archaeological assemblage may question the significance of studies of small skeletal series of the size encountered at Pochampad and

adjacent Iron Age sites in peninsular India. Certainly for some measures of human biological diversity and evolutionary change, an abundance of specimens of both sexes and a broad spectrum of ages at time of death are desirable for comparative morphometric and statistical analyses. But this is not the portion allotted to the palaeoanthropologist in the recovery of the majority of prehistoric skeletons, such as hominid fossils from late Miocene to mid-Holocene antiquity for which "populations" are nonexistent. And when taphonomic agents contributing to poor preservation of osseous and dental remains are combined with poor standards of curation in certain research institutions to which excavated specimens have been transported and maintained, the scientific investigator has no choice but to accept the philosophy of the palaeontologist that you must work with what you have at hand. Alternatives are unthinkable!

Given these constraints, what has been learned about the biological anthropology of the Iron Age inhabitants of Pochampad and their contemporaries whose skeletons and dentitions have been salvaged from other megalithic burial sites in peninsular India and Sri Lanka? Answers to this question emerge from the morphometric studies conducted by trained biological anthropologists and the publication of the research results of their laboratory and statistical analyses (e.g., Kennedy 1975, 1984, 1999, 2000a, 2000b, 2000c; Kennedy and Levisky 1984; Kennedy et al. 1986; Lukacs 1985, 1992; Sarkar 1972; Walimbe 1987–1988, 1991–1992, 1992; Walimbe et al. 1991; Walimbe and Selvakumar 1998).

These investigators are aware that the physical variables and evolutionary changes they observe in skeletal series from South Asia have parallels in many other parts of the world where plant and animal domestication supplemented hunting and foraging economic strategies and essentially replaced it in urban cultural settings (Cohen and Armelagos 1984). Over the past 10,000 years since the origins of food-production practices in western Asia, those *Homo sapiens* populations, adapting to this new lifeway, underwent cultural changes involving sedentary village habitations, greater densities of populations in large village and later urban centers, increases in certain pathological stressors including infectious diseases, advances in technology, and changes in social organization. And accompanying these socioeconomic transitions were biological changes of which some are recorded in skeletal architecture and dental size and morphology. Large body size and greater physical stamina, which was adaptive to the hunting-foraging lifeway, particularly among males, became less critical for survival among sedentary populations whose nutritional resources came through field labor and pastoralism. Indeed, reduced body size may have been adaptive under conditions of dietary preferences with reduced consumption of flesh and dairy foods high in protein (Stini 1975), and among modern populations, taller stature and larger body mass is encountered among those societies in the northern sectors of the subcontinent where meat and milk consumption is greater than in peninsular India (Takahashi 1971). Also with the onset of the Neolithic cultural configurations there was a reduction in muscular-skeletal robusticity, as documented in skeletal morphology, and reduction of sexual dimorphism. It is probable that the evolutionary mechanism operative here was relaxed natural selection (Brace 1978, 1995).

Estimation of stature for the Pochampad series falls within the range of 1490–

1877 mm for pooled male and female adults from six Iron Age sites in India and Sri Lanka, but well above the mean of 1680 mm for this sample (Table 3). These estimates are based upon measurements of long bones of the upper and lower extremities and applications of the regression formulae for adult males and females of European ancestry according to a method widely used in forensic anthropology (Trotter 1970). The single stature estimate available from Pochampad is from femoral and tibial lengths of an adult skeleton of undetermined sex and indicates a body height well above that of the mean stature determined for skeletons of other Iron Age individuals.

Dental pathology is in low frequency among the preserved remains of the Pochampadians. Specimen No. Kennedy A shows severe wear along its anterior tooth row (often a consequence of use of the incisors and canines for grasping and abrasive tool-like actions and other employments of the front teeth in some habitual activity), and antemortem chipping of the posterior dentition. Specimen No. 1966, 5/6, Megalith III, has six hypoplasial lines on the right canine. Caries are not present in the Pochampad series, save for Specimen No. 1966, 5/6 (Kennedy B1), nor are cases of malocclusion, crowding, and dental calculus encountered. These are dental pathological conditions found most commonly in earlier farming and pastoral populations when compared to other ancient hunting-foraging populations within and beyond the Indian subcontinent (Lukacs 1992). Cariogenesis increases when diets are high in fermentable carbohydrates derived from sticky foods that adhere to tooth surfaces (Nelson et al. 1999; Pal 1981).

Although the cranial and postcranial bones are fragmentary in the Pochampad series, there are no observed cases of traumatic lesions inflicted by interpersonal violence or accidents. All breakage in bones and teeth are due to postmortem agents related to erosional factors, signs of predators' gnawing and dismemberment are absent. This is unexpected in cases of secondary burial.

Phenotypic variation is a conspicuous feature of peninsular India's and Sri Lanka's Iron Age populations, as elsewhere in the subcontinent. Craniological typologies do not exist, nor do earlier statements of racial identities based upon a specific set of morphometric criteria support any theory that iron was diffused to South Asia by foreign populations whose origins lay outside of this part of the world, as some biological anthropologists have proposed (Sarkar 1972). In short, phenotypic homogeneity has not been a marker of these post-Neolithic, pre-*Early Historic* populations. Instead, heterogeneity has characterized these iron-users whose skeletons have been recovered from different regions of the subcontinent. Correlated with this evidence documented in the comparative skeletal record is the argument that there was demic continuity of the Iron Age populations of southern India and Sri Lanka with the *Early Historic* populations succeeding them, although regional shifts in enclaves of South Asian prehistoric peoples are likely to have taken place from time to time. The skeletal evidence does not support any hypothesis of catastrophic and sudden population replacements in peninsular India during the Iron Age.

South Asian Iron Age populations with relatively shorter histories of food-production practices, as indicated by radiometric and thermoluminescence dating methods and archaeological data, may retain higher degrees of muscular-skeletal

robusticity than that encountered in other Iron Age populations with more ancient commitments to plant and animal domestication. The former retain higher frequencies of some skeletal features of greater muscular-skeletal robusticity and taller statures. Such is the nature of the skeletal series from the Iron Age burials from Timargara, Mahurjhari, Yeleswaram, and S. Pappinayakkanpatti (Fig. 1). Closely correlated with these skeletal variables characteristic of pre-Neolithic ancestry, which were preserved by those early agricultural and pastoral societies in which hunting and foraging remained a significant supplementary part of their socioeconomic strategy for survival, are changes in the sizes of crown areas of permanent molar teeth (Lukacs 1982). With respect to the summed molar crown area (as determined by calculations of squared occlusal molar crown areas of distances, measured in millimeters, of bucco-lingual and mesio-distal diameters), the range for South Asian dental series is 683–551 mm² (Fig. 6). Three individuals from Pochampad have values of 594.43, 569.39, and 675.88 for Specimen Nos. Kennedy A, 1966, 5/5, Kennedy B1, and 1966–1964, Megalith II, respectively. The mean value of 613 is near the mean for all permanent molar dental series from other Iron Age burials, below the values for series from Pomparippu and Sarai Khola, and above the values for the series from Tadakanahalli, Kamaranahalli, Tenneru, Raipur, and Raigir (Kennedy 1997). Considering the reduced degree of muscular-skeletal robusticity of cranial and postcranial bones and relatively small permanent molar tooth size, it is hypothesized that the Pochampad population was derived from a relatively ancient lineage of pre-Iron Age farmers and herders. That is, the Pochampad community had not adapted food-production strategies during the final phases of the Iron Age and preserved those physical variables characteristic of Iron Age populations with mixed hunting-foraging and farming-herding practices which retained certain phenotypic features of their Neolithic forebears.

This thesis offers more satisfactory answers to questions of biological profiles, phenotypic diversity, genetic affinities, and evolutionary adaptations of the Iron Age peoples of South Asia than traditional notions evoking mass migrations of hordes of exotic races, often from lands beyond the Himalaya, or identifying ancient populations by their ceramic achievements to which racial typological names were assigned. Given the small size and catalog problems of the Pochampad skeletal series, the present study does not purport to be palaeodemographic in scope. Nor is it possible within the confines of this article to provide comprehensive morphometric analyses and incorporation of comparative data from all South Asian Iron Age sites, although the citations in the text and references will direct the reader to the published sources where these procedures are described. Rather, it is emphasized that small skeletal series from prehistoric localities, such as Pochampad, merit the same degree of scientific scrutiny accorded larger cemetery series because they provide the only data we shall ever have available to reconstruct the lifeways and biological profiles of extinct populations. From the Pochampad skeletal and dental data it is concluded that there was considerable phenotypic heterogeneity among Iron Age peoples of southern India and Sri Lanka, and that there was continuity of population of these last representatives of South Asian prehistory with their Early Historic successors whose cultural achievements evolved into the civilizations of Hindu, Buddhist, and Jain cultural patterns of modern times.

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ABSTRACT

Human skeletal remains from a burial site in southern India excavated in the 1960s by the Department of Archaeology and Museums of the Government of Andhra Pradesh, Hyderabad, have been analyzed. The burials were recovered from three megalithic graves containing iron weapons and horse trappings, pottery and terracotta figurines, stone blades, pieces of copper, and faunal remains of domesticated species. These assemblages are hallmarks of the southern Indian Iron Age (Megalithic period) of the last three centuries B.C. Laboratory examination of the human skeletal and dental remains provide new information concerning the phenotypic heterogeneity of Iron Age populations, their physical changes in stature and tooth size, reduction of muscular-skeletal robusticity and sexual dimorphism, and other biological features reflecting evolutionary adaptations from an ancestral hunting-foraging lifeway to settlement in sedentary villages. The data from the study of the skeletal-dental biology of the inhabitants of Pochampad offer new insights into the health status and profiles of growth and development of these and other Iron Age populations in this part of the world. It is concluded that there was considerable phenotypic heterogeneity among these Iron Age communities of southern India and Sri Lanka, and that there was a continuity of populations over time rather than any abrupt demographic displacement of earlier Neolithic populations by invasions of some foreign, early iron-using peoples. Similarly, the biological data suggest that there was continuity of populations and gradual emergence of these last representatives of South Asian prehistory with their Early Historic period successors. KEYWORDS: Indian Iron Age, megalithic burials, biological anthropology.